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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,450	08/31/2001	Atsushi Hohkita	381NP/50238	9456

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CROWELL & MORING LLP  
INTELLECTUAL PROPERTY GROUP  
P.O. BOX 14300  
WASHINGTON, DC 20044-4300

EXAMINER

TRIEU, THAI BA

ART UNIT	PAPER NUMBER
3748	12

DATE MAILED: 07/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/943,450	HOHKITA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Thai-Ba Trieu	3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on the Amendment filed on June 10, 2003.

2a) This action is **FINAL**.                  2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1,2,4,30,34 and 58-61 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) 34, 60 and 61 is/are allowed.

6) Claim(s) 1,2,4,30,58 and 59 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ .
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .	6) <input type="checkbox"/> Other: _____ .

## DETAILED ACTION

This Office Action is in response to the Amendment filed on June 10, 2003.

1. Claims 1-2 were not amended.
2. Claims 4, 30, 34, were currently amended.
3. Claims 3, 5-29, 31-33, and 35-57 were cancelled.
4. Claims 58-61 were added.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claims 1-2, 4, and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Nohira (Patent number JP 356018026 A).***

**Regarding claims 1 and 4,** Nohira discloses an exhaust gas turbine for an internal combustion engine connected to an exhaust pipe of the engine, which comprises:

an exhaust gas turbine inlet port (via 22) for guiding exhaust gas into said turbine (T);

an exhaust gas catalyst inlet port (via 26) for guiding the exhaust gas to a catalyst (24), the exhaust gas after passing through said turbine being guided into said exhaust gas catalyst inlet port; and

a supercharger (C) disposed in an intake air passage of said Internal combustion engine being attached so as to be driven by said turbine (T) (See Figure, and Abstract)

**Regarding claims 2 and 4,** Nohira discloses an exhaust gas turbine for an internal combustion engine, which comprises:

an exhaust gas passage (via 26) for guiding exhaust gas into a catalyst (24), said exhaust gas passage being connected to an exhaust passage (12) of said engine;

a bypass exhaust passage (via 22) integrated with said exhaust gas passage as a unit; and

a turbine (T), which is attached to said bypass exhaust passage (22) (See Figure, and Abstract);

a supercharger (C) disposed in an intake air passage of said internal combustion engine being attached so as to be driven by said turbine (T) (See Figure).

*Nohira*  
**T15 Regarding claim 30,** Piech discloses an exhaust turbo-supercharger for an internal combustion engine, in the internal combustion engine comprising:

an exhaust passage for guiding exhaust gas from an exhaust manifold (11) of said internal combustion engine (1) into a catalyst (24) through a turbine case of said exhaust gas turbine (T) (See Figure).

an bypass exhaust passage (via 26) connected to an inlet of said catalyst (24) and arranged in parallel with said exhaust gas passage as a unit (See Figure); and

an open/close valve (29) for opening and closing said bypass exhaust passage where said engine starts, wherein a flow passage resistance of said exhaust bypass flow passage being smaller than a flow passage resistance of said exhaust gas passage (the diameter of the exhaust bypass is greater than the diameter of the turbine flow passage, therefore the resistance in the exhaust bypass passage should obviously be smaller, See Figure).

***Claims 1-2, 4, 30, and 58-59 are rejected under 35 U.S.C. 102(b) as being anticipated by Piech (Patent number DE 4139291 A).***

**Regarding claims 1 and 4,** Piech discloses an exhaust gas turbine for an internal combustion engine connected to an exhaust pipe of the engine, which comprises:

an exhaust gas turbine inlet port (via 28) for guiding exhaust gas into said turbine (20);

an exhaust gas catalyst inlet port (via 36) for guiding the exhaust gas to a catalyst (26), the exhaust gas after passing through said turbine being guided into said exhaust gas catalyst inlet port; and

a supercharger (22) disposed in an intake air passage of said Internal combustion engine being attached so as to be driven by said turbine (36) (See Figure, and Abstract)

**Regarding claims 2 and 4,** Piech discloses an exhaust gas turbine for an internal combustion engine, which comprises:

an exhaust gas passage (via 36) for guiding exhaust gas into a catalyst (26), said exhaust gas passage being connected to an exhaust passage (14) of said engine;

a bypass exhaust passage (via 28) integrated with said exhaust gas passage as a unit; and

a turbine (20), which is attached to said bypass exhaust passage (28) (See Figure, and Abstract);

a supercharger (22) disposed in an intake air passage of said internal combustion engine being attached so as to be driven by said turbine (20) (See Figure).

**Regarding claim 30,** Piech discloses an exhaust turbo-supercharger for an internal combustion engine, in the internal combustion engine comprising:

an exhaust passage (36) for guiding exhaust gas from an exhaust manifold (14) of said internal combustion engine (10) into a catalyst (26) through a turbine case of said exhaust gas turbine (20) (See Figure).

an bypass exhaust passage (via 28) connected to an inlet of said catalyst (26) and arranged in parallel with said exhaust gas passage as a unit (See Figure); and

an open/close valve (40) for opening and closing said bypass exhaust passage where said engine starts, wherein a flow passage resistance of said exhaust bypass flow passage being smaller than a flow passage resistance of said exhaust gas passage (the diameter of the exhaust bypass is greater than the diameter of the turbine

flow passage, therefore the resistance in the exhaust bypass passage should obviously be smaller, See Figure).

**Regarding claims 58-59,** Piech discloses a motor (42) driving said open/close valve for opening and closing said exhaust gas catalyst inlet port and bypass exhaust passage (See Figure).

***Claims 1-2, 4, and 30 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Iwamoto (Patent Number 4,437,311).***

(See Figure 1, and Column 3, lines 6-39).

***Claims 1-2, 4, and 30 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Fernandez (Patent Number FR 2 752 880 a1).***

(See Figure 1, Page 6,lines 29-35, and pages 7-12, lines 1-35).

***Claims 1-2, 4, and 30 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Asaki et al. (Patent Number JP 404370327 A).***

(See Figure 1, and Abstract).

***Claims 1-2, 4, and 30 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Koike (Patent Number JP 404103817 A).***

(See Figure 1, and Abstract).

***Claims 1-2, 4, and 30 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Usui (Patent Number JP 357126516 A).***

(See Figure, and Abstract).

***Claims 1-2, 4, and 30 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Lauvin (Patent Number EP 0 266 256 1A).***

(See Figure 1, and Column 2, lines 52-63, Column 3, lines 1-65, and Column 4, lines 1-56).

***Claims 1-2, 4, and 30 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Huber (Patent Number DE 195 03 748 A1).***

(See Figure 1, and Abstract).

***Claims 1-2, 4, and 30 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Ottowitz (Patent Number DE 43 11 904 A1).***

(See Figure 1, and Abstract).

***Claims 1-2, 4, and 30 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Fuoss (Patent Number DE 196 54 026 A1).***

(See Figure 1, and Abstract).

***Claims 1-2, 4, and 30 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Guimbretiere (Patent Number FR 2 650 860A1).***

(See Figure 1, and Abstract).

#### ***Allowable Subject Matter***

Claims 34 and 60-61 are allowed.

#### ***Response to Arguments***

In response to applicants' request for a reduction of the eleven overlapping rejections in accordance with normal Office practice. When applicants draft claims of the scope presented in this application, the examiner has no choice, but to present all the art which clearly anticipates the pending claims. Note applicants' search report that was issued from the Hague, that Examiner too found and applied numerous X references overlapping claims. Accordingly, the number of references applied in this office action remains unchanged.

With regard to applicants' argument on page 11 that none of the cited references include features of applicants' invention, such as "*an arrangement in which, as the exhaust gas is guided directly to the catalyst, the exhaust gas directly heats and quickly warms up the catalyst to minimized retardation of catalyst activation*", such an argument is not germane to the claimed invention, and it is claims, not specifications that are anticipated or unpatentable. *Constant v. Advanced Micro-Devices Inc.*, 7USPQ2d 1064.

Assuming *argumendo* that applicants' arguments are correct, that none of the applied references teach or suggest exhaust gas guided to the catalyst for minimizing or retarding of catalyst, which is clearly not the case. All exhaust treatment devices such as a catalyst have an activation temperature, i.e. the temperature at which the device becomes active. In the exhaust treatment art, there exists an entire subclass 60/284 devoted to providing a quick warm-up of the catalyst from the engine starting, all such patents contained therein address applicants arguments in paragraph 4 of page 11. Additionally, **60/301** is an entire subclass devoted to providing a catalyst in the engine manifold or at the exhaust port of the engine. This is for one simple reason; catalysts do nothing for exhaust purification when operated below their activation temperature.

With regard to applicants' arguments on page 12, Paragraphs 1-4, applicants argue that either *the converter (45) of Iwamoto et al., in Figure 1, or the converter (24) of Nohira et al., in Figure 1, can neither be heated quickly, nor can activation of the catalyst converter occur quickly*. The examiner respectfully disagrees since such arguments are not germane to the claimed invention.

Claims in a pending application are given their broadest reasonable interpretation. See *In re Pearson*, 181 USPQ 641 (CCPA 1974).

With regard to applicants' arguments on page 12, Paragraph 4, applicants argue that *Yoshikawa et al. shows a fan construction without any characteristic feature of the present invention*. The examiner did not rely on the fan, air blower, or compressor;

however, the examiner merely relied on the teaching of a porous material applied on an inner wall surface of a turbine flow passage in order to reduce the fluid noise. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

With regard to applicants' arguments on page 13, Paragraph 1-3, applicants argue that Danno et al, Kageyama et al. and Kibe do not teach "*an exhaust gas guided directly to the catalyst in one of two ways, namely, straight to the catalyst (e.g. way of a straight pipe) or by making the flow resistance of the exhaust gas passage*". The examiner respectfully disagrees because the arguments are not germane to the claimed invention. Moreover, the examiner has pointed to several references, which provide an exhaust bypass of larger diameter than the alternate passage. Such clearly decreases flow resistance.

### ***Conclusion***

Applicant's arguments filed June 10, 2003 have been fully considered but they are not persuasive. Accordingly, claims 1-2, 4, 30, 34, and 58-61 are pending.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai-Ba Trieu whose telephone number is (703) 308-6450. The examiner can normally be reached on Monday - Thursday (6:30-5:00), first and second Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on (703) 308-2623. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9302 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.

TTB  
July 16, 2003



Thai-Ba Trieu  
Patent Examiner  
Art Unit 3748



THOMAS DENION  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700